

ELECTRICITY

Electric Fields

A gravitational field is a region where a mass experiences a force.

Similarly on Electric fields is a region where a charged particle experiences a force.

Gravity only attracts but Electric force can be attractive or repelling

$+$	\rightarrow	\leftarrow	$-$		\leftarrow	$+$	$+$	\rightarrow		\leftarrow	$-$	$-$	\rightarrow
opposites attract					like charges repel					like charges repel			

Field lines go in the direction that a positive $+$, charge would move i.e. $+$ \rightarrow $-$

$+$ $-$

The field is stronger where the field lines are closer together.

Electric field Strength

Q = Charge Coulombs (c)

F = Force (Newtons)

E = Electric Field Strength (NC^{-1})

Smicro coulomb (5×10^{-9})